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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/919,706 | 08/01/2001 | Kenichi Nanpei | 1232-4747 | 5403 |

27123 7590 03/20/2007
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NEW YORK, NY 10281-2101

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| EXAMINER |
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HUNTSINGER, PETER K

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| ART UNIT | PAPER NUMBER |
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2625

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/20/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/919,706

Applicant(s)

NANPEI, KENICHI

Examiner

Peter K. Huntsinger

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-10,13-18 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-10,13-18 and 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/16/06 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 4-10, 13-18, and 21-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Please change line 2 of the claim to replace "comprises" with either "comprising" or "which comprises". Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-6, 8-10, 13, 14, 16-18, 21, 22, and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda '585, and further in view of Pinzarrone '158.

Referring to claim 1, Masuda '585 discloses an image reading apparatus which operates with power supplied from an external power supply which comprises an image sensing unit for reading an image (see copying machine of Fig. 1), the image apparatus comprising: a detector for detecting an abnormality of an interface on the basis of an electric potential of a predetermined position of the interface (S50 of Fig. 5B, col. 6-7, lines 65-68, 1-11+); and a controller for setting said image reading apparatus in a sleep state with the image reading apparatus being supplied with power from the external power supply, in response to detection of any abnormality of the interface during an image reading process controlled by the external apparatus until the communication with the external apparatus restarts (S55 of Fig. 5B, col. 7, lines 22-31+), wherein at least one of an internal circuit and mechanical position of the image sensing unit is initialized to the state identical to the state at the time when the apparatus is powered on before or after the apparatus is set to the sleep state (S56 of Fig. 5B, col. 7, lines 31-41+). Masuda '585 does not disclose expressly the image forming apparatus operating under control of an external apparatus and transferring an image signal to the external interface through an interface. Pinzarrone '158 discloses an image reading apparatus which operates under control of an external apparatus and an interface for transferring an image signal read by an image sensing unit to the external apparatus (see Fig. 1,

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col. 2-3, lines 66-67, 1-12+). At the time of the invention, it would have obvious to a person of ordinary skill in the art to control and supply power to an image reading device with a computer. The motivation for doing so would have been to forward scanned images to the computer and eliminate the need for a separate cable from the image reading device to a power outlet. Therefore, it would have been obvious to combine Pinzarrone '158 with Masuda '585 to obtain the invention as specified in claim 1.

Referring to claim 4, Masuda '585 discloses a light source for irradiating a document with light; a moving unit for moving a relative position between an image of the document and said image sensor (copying machine see Fig. 1); and a setting unit for stopping power supply to at least one of said light source and said moving unit in the sleep state in accordance with a setup of a controller (col. 7, lines 34-41+). Masuda '585 does not disclose expressly converting reflected light into an electric signal.

Pinzarrone '158 discloses an image sensor for converting light reflected by a document irradiated with light from said light source into an electrical image signal (col. 5-6, lines 67, 1-5+). At the time of the invention, it would have obvious to a person of ordinary skill in the art to digitally convert scanned images. The motivation for doing so would have been to forward scanned images to the computer. Therefore, it would have been obvious to combine Pinzarrone '158 with Masuda '585 to obtain the invention as specified in claim 4.

Referring to claim 5, Masuda '585 discloses an image reading apparatus but does not disclose expressly an A/D converter and transferring the image to the external device. Pinzarrone '158 discloses an A/D converter that converts the image signal and

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wherein the signal is sent to an A/D converter for converting the image signal output from the image sensing unit into a digital signal, wherein the interface transfers the digital image signal converted by said A/D converter to the external apparatus (col. 5-6, lines 67, 1-5+). At the time of the invention, it would have obvious to a person of ordinary skill in the art to digitally convert scanned images and forward them to the computer. The motivation for doing so would have been to store scanned images on the computer. Therefore, it would have been obvious to combine Pinzarrone '158 with Masuda '585 to obtain the invention as specified in claim 5.

Referring to claim 6, Masuda '585 discloses wherein said detector detects any abnormality of the communication unit by detecting a change in potential of a power supply line included in the interface (S50 of Fig. 5B, col. 6-7, lines 65-68, 1-11+).

Referring to claim 8, Pinzarrone '158 discloses wherein the interface has a function of allowing to plug/unplug a cable without turning off a power supply of the external apparatus (The computer of Fig. 1 must include a connection to a power supply).

Referring to claim 9, Pinzarrone '158 discloses wherein the function of the communication unit complies with USB or IEEE1394 (See Fig. 2).

Referring to claim 10, see the rejection of claim 1 above.

Referring to claim 13, see the rejection of claim 5 above.

Referring to claim 14, see the rejection of claim 6 above.

Referring to claim 16, see the rejection of claim 8 above.

Referring to claim 17, see the rejection of claim 9 above.

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Referring to claim 18, see the rejection of claim 1 above.

Referring to claim 21, see the rejection of claim 5 above.

Referring to claim 22, see the rejection of claim 6 above.

Referring to claim 24 see the rejection of claim 8 above.

Referring to claim 25 see the rejection of claim 9 above.

Referring to claim 26 see the rejection of claim 1 above.

Referring to claim 27 see the rejection of claim 8 above.

Referring to claim 28 see the rejection of claim 9 above.

6. Claims 7, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda '585 and Pinzarrone '158 as applied to claims 1, 10, and 18 above, and further in view of Juve '428.

Referring to claim 7, Masuda '585 discloses a detector detecting abnormality of the interface, but does not disclose expressly detecting the voltage of a data line. Juve '428 discloses detecting a change in a voltage-level of a data line included in an interface. At the time of the invention, it would have obvious to a person of ordinary skill in the art to detect the voltage of a data line. The motivation for doing so would have been to test the data line for errors. Therefore, it would have been obvious to combine Juve '428 with Masuda '585 and Pinzarrone '158 to obtain the invention as specified in claim 7.

Referring to claim 15, see the rejection of claim 7 above.

Referring to claim 23 see the rejection of claim 7 above.

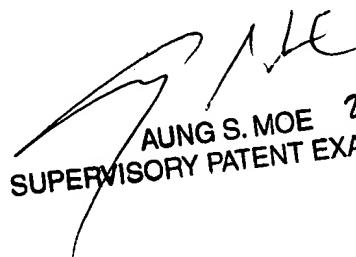
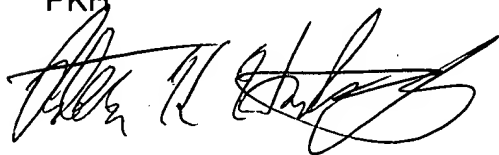
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moe Aung can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PKH



AUNG S. MOE 2/16/08
SUPERVISORY PATENT EXAMINER